

# Model 94

## ID SPIRAL CLADDING WELD HEAD



## THE WIDEST RANGE OF ORBITAL WELDING EQUIPMENT IN THE WORLD

The Model 94 is a rugged weld head designed for high production spiral or step ID cladding and groove welding on small diameter pipes, fittings and vessel inlet/outlets, using the GTAW (TIG) process with cold wire feed. The Model 94 is a stable, precise and repeatable platform for manipulating many different torches for welding and cladding operations.

The Model 94 uses accessories to accurately position the weld head in axial alignment with the part to be clad. A manual travel clutch allows fast insertion and extraction of the torch and axial readout gives precise torch location. The use of commutators in the M94 allows continuous torch rotation. Cables are stationary. The M94 is self-supporting on the work piece and can operate in any position.

### INDUSTRY

- Nuclear
- Power Generation
- Shipyards
- Offshore
- Oil and Gas

### FEATURES

- In-place ID cladding of nozzles
- Servo-controlled AVC
- Servo-controlled rotation and axial travel
- Axial position readout
- Stainless steel rack-and-gear drive for consistent travel speeds in all positions (no friction drives)
- Manual travel clutch to allow rapid insertion and extraction of torch
- Pulsed current welding, and synchronized pulsed-wire feed
- Unlimited torch rotation (no cable wrapping)
- Continuous spiral cladding capability (depending on application)
- Pre-set function for H.F. starts
- Servo-controlled wire feed

Visit [arcmachines.com](http://arcmachines.com) for more information.

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QUICK SPECS	
AVC Stroke	0.625" (16 mm)
Wire Feed Speed	5 - 100 IPM
Rotation Speed	0.1 - 2.0 RPM (13 - 250 cm/min.)
Axial Speed	0.020 - 1.01 IPM (0.50 - 25 mm/min.)
Axial Travel	24" or 34" (610 or 864 mm)
Tungsten Size	3/32" or 1/8" (2.4 or 3.2 mm Ø)
Filler Wire	0.030" recommended (0.8 mm Ø)
Wire Spool	8" or 4" diameter (200 or 100 mm Ø)
ID Range	0.68" - 6.75" (17 - 171 mm)
Weight	93 lbs. (42 kg)

## OPTIONAL HARDWARE

- Large selection of water-cooled standard or special torches for cladding or groove welding applications
- Axial travel carriages with other than 24" (60 cm) travel
- Custom torch sizes available



## COMPATIBLE AMI POWER SUPPLIES

The Model 94 is compatible with the following AMI Power Supplies:



**MODEL 415 WDR**  
PROGRAMMABLE MULTI-FUNCTION POWER SUPPLY.



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